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Pacific Paradise

In March of 1991 Dave Patton, AA9AK, (former WO0G) and Mark Obermann, AG9A, made a small DXpedition to the Pacific. With no set itinerary they planned their first stop on Guam. They also planned to compete in CQWW CW while in the Pacific.

The adventure as told by Dave, AA9AK, is an interesting one. Their experiences with airlines, hotels, and pileups should prove worthwhile information for those planning a trip to the Pacific.

BT: What was your motive for the Pacific expedition?

DP: Fun. There's just a bunch of reasons we went. I guess we were just kind of tired of operating from the U.S. and we wanted to go out to the Pacific where I still had contacts, friends to stay with like KD7P, and KG6DX. It would be nice to see them again, I thought, and airfare wasn't really that expensive and it was a good time to go. I had time off school and Mark was able to get time off work. We'd been talking about going somewhere for years and we just decided one night, let's just go. Although we'd both operated overseas for a little bit, and I'd spent a couple of years over there, we'd never done an expedition. We didn't go anywhere really rare, but it was a good experience.

BT: You'd spent time over there before?

DP: I was in the Navy for three years, with active duty, most of it on Guam from 1983 to 1985. I used to be AH2U.

BT: You've changed your stateside call again. Are you collecting call signs?

DP: I hate all my calls. My new one is AA9AK. We used that on phone from Guam.

BT: I kept listening for WO0G, or Mark's call, AG9A.

DP: Well, we flipped coins, we decided to use his call on code because his call is much better. We didn't make very many Qs on phone. Code was much more fun to us, 75% of our contacts were on code at all three locations.

BT: You and Mark, AG9A, left here the 11th of May headed for Guam.

DP: Yes, right to Guam.

BT: What was your equipment complement?

DP: Just about everything we owned I think. We borrowed alot too. We had two Kenwood 930's a couple of Bencher keyers, 300 feet of coax, a Dentron tuner, an MLA-2500 amplifier, an A-3 tri-bander, actually we sent that to Guam, and then picked it up from there, and several hundred feet of wire.

BT: Were you worried about damage to the equipment?

DP: We weren't worried from the beginning about anything getting broken because we borrowed three large aluminum suitcases with custom cut foam. K9RS loaned us those. The 930s fit really nice and we had a big one for the amplifier. But we had counted on carrying the 930s aboard that way and they woundn't let us. They were too big. So we got stuck at O'Hare trying to get out, we'd just been dropped off and we ended up taking the 930s out and hand carrying them the rest of the trip without any protection. We had never considered that so we didn't even wrap them in plastic. And we had to get rid of the two suitcases too, that was the hard part. We ended up checking them on empty, "maybe we'll have some use for them, as long as we're carrying 500 pounds of stuff." The 930s fit perfect under the seat by themselves. The best way to do it, it turned out. You couldn't put them in the overheads because they were too big.

BT: So you finally reached Guam.

DP: We got to Guam, and we said we were going to decide where we were going to go from there. We were going to talk to a local travel agent because sometimes there are special deals to other islands. We didn't get any. Then we decided well, we'll go to Hong Kong and see our friend Steve, VS6WO. So we went to the travel agent again, but couldn't get back to Guam in time for WPX. We couldn't arrange that trip to Hong Kong no matter how we tried. And we didn't have the week needed to go to Bali and Indonesia, we couldn't stay less than a week. The last place we tried was Saipan, that was easy and cheap, and it's only 150 miles or so from Guam. We went there kind of on a whim. It took us a few hours to find a place to stay but it turned out OK.

BT: So you operated from Saipan?

DP: Everywhere. We took the one 930 and borrowed KD7P's TS680 and carried the dipoles, and borrowed another 6-meter beam from him and a 6-meter brick.

BT: How was 6 meters?

DP: We made two contacts with Okinawa the whole time. We didn't try real hard, we were only there for three days. Conditions were good, I just don't think there was any activity.

BT: What's it really like to operate from an island in the Pacific?

DP: It's fun. That's the best way to put it. Makes you appreciate the difficulty of operating from the States. I mean it's so easy with garbage antennas to make thousands of contacts anywhere on the planet. You really struggle here in the U.S. In the WPX CW contest we ended up with 3705 contacts. Conditions were pretty bad. The days were terrible, the nights were OK. The rates were good at night, especially into Europe. But the whole trip conditions were really bad until the last day.

We weren't even supposed to be there the last day on Palau because we were supposed to have flown out already and they had canceled our flight so we had an extra 18 hours. We stayed up all night and the rates were great. I had an opening for several hours into the East Coast. A rate of 195 an hour on CW. We made 1700 Qs the last night. I even ran Europeans on 80 in the morning. And that's difficult from the Pacific. These guys were pretty surprised.

BT: You always think of all the big guns from the U.S. What do you hear most? Do you really hear a lot of U.S. stations?

DP: Well, the conditions were kind of poor. I can pretty much answer that with saying that 90% percent of the signals you hear are from Japan. And then you might hear some stateside interspersed with VKs and Indonesians, there's a lot of guys on from Indonesia. From the States mostly California and W7's. It takes a really good opening to get to the East Coast. We should be able to work the Midwest a lot easier than we do but we don't. Fives are quite easy to work too, anybody south, especially south and west you can work all the time. It takes a little more to get to the 9s and 0s, 1s and 2s and 3s.

BT: It's interesting how that propagation works.

DP: The 6s are unquestionably the loudest. Tremendous signals from those guys. You kind of feel bad for them now because they don't get the Europeans we get in the Midwest, or the East Coast gets when JA rates are down. What do they have? You can only work so many guys in Guam. We can just hope that the Chinese start licensing people at the rate that they do in Japan then they'll have some rates.

We got to Guam at 3 in the morning. I couldn't sleep and Mark kind of took a nap. KD7P and I went up on his tower at 6 in the morning and took his KT34 down and started tuning it because it hadn't worked right in years. We took it up and down the tower eight times during the week, for 12 days we were trying to get the thing to tune. Never really did, we had to use the tuner. Mark built some 15 meter power dividers and he put our A3 up too. We put up an 80-meter wire and it didn't work, and just dipoles for 40.

BT: How did the power splitting work?

DP: It didn't. It actually was working, but it just seemed to subtract or halve the signal in the critical opening hour.

BT: Later you went to Saipan?

DP: On Saipan, we got there with the idea we were only going to spend three days, we didn't bring the tri-bander. We just brought some wire. By the time we found a hotel it was pretty late, like 8 or 9 in the evening, it'd been dark for a couple of hours and we didn't know what we were going to do. We couldn't get permission to go on the roof the first night. So we built a 20 meter dipole because we didn't have one. We slung it out the window but we couldn't get it to load just hanging out the window. We were on the third floor and only 30 feet up. It wasn't high enough to get the dipole extended. It wouldn't load, wouldn't do anything even with the tuner and the 930. So we kind of waited around for awhile, and I said, "I can't give up. We're going to waste a few hours here, even though we were really tired and we wanted to sleep. This is a good time to be operating." I tied a piece of metal from the 6-meter beam, to some mounting bracket. We opened the doors and there was a little balcony, which was nice. And I just slung it out onto this tree, and it actually kind of hung over the palm tree and then coiled up on the ground. It loaded perfectly. A second later I had an East Coast pile-up calling me. Just 100 watts and this really bad antenna. I worked 500 or 600 guys, the pile-up was huge. That was our best antenna.

BT: Being from out there, how were the pile-ups from stateside compared to other parts of the world. Are they as unruly as they seem to be here?

DP: Stateside piles were never unruly. And we never had any big ones until the last day on Palau. Conditions just weren't good enough for stateside. The European conditions were always good for pile-ups and the Europeans are incredibly bad. It's hard to explain how unruly they are. Sometimes you just have to sit back and laugh. They never shut up and their rates are obviously suffering, you can't do better than 180 an hour. The first couple of nights we were there we stayed up and worked Europeans. We were loud, we were 40 or 50 over 9 they were saying. We had a pile-up that we had to spread out 10kc's. And it didn't matter who you tried to come back to, they just go on and call and call and call. The statesiders are much better. But the Pacific is generally rarer in Europe.

BT: What do you feel the cause is for the unruliness?

DP: I'm not sure, I kind of think the main problem behind the unruliness is the use of packet and the additional DXCC awards they keep offering. Now all of a sudden if the guy doesn't work you on five bands then there's a problem, and the pile-ups are huge for things that shouldn't be. People with small stations that want to work an all-time new country have a real hard time doing it.

BT: Like people wanting to work Albania 10 times on SSB and CW all bands.

DP: You don't need to do it. If the guy wants to work us on 10 code, 15 phone, 20 any mode, but 10 code and 10 phone is not necessary. So long as they don't dupe us up too bad. And KD7P, I'm sure you've heard his controversial QSL policy. If you dupe him on the same band mode, he won't send you a card for any contact. He's done that to a lot of people. I kind of like the policy but there's a lot of people that have been affected.

There's a lot of things that could come up wrong with that, like if somebody bootlegs your call, and I know it happens.

BT: How were the pileups from Palau?

DP: Pile-ups were pretty fierce from Palau compared to the other places. We had our big hours in Palau. Europeans are bad, JAs aren't much better. As long as we're talking about this, JAs are OK, they're quite a bit more cooperative, but they're so cooperative to the point it makes them bad. If I come back to JA1AAB, if I hear JA1AA and I say OK the JA1 Alpha, Alpha station without putting the Bravo on, he won't transmit, he'll think, "What if JA1AA is calling?" so then nothing. "OK the JA1 with the AA in the call" and then he'll call you. And everyone of them does that, except the contester-types that understand that. Plus they all have six characters to the call, almost, and they repeat it over and over. The Europeans were really, really bad about that. If I came back to one guy with six letters in his call, six figures, perfect. If I got the call perfect out of the pile-up, he'd send it twice. It's amazing, over and over. The statesiders don't do that. What the statesiders do is give you two letters of the call.

BT: What do you prefer? Do you like to hear the two letters?

DP: No, that's horrible. It slows you down so bad it's unbelievable. No matter where you are, if it's rare or not.

BT: Sideband or CW, you want to hear the whole call?

DP: Whole call. Always. Because more times than not you can get the whole call. And a lot of times a guy will give you two letters and that's all you'll ever get. It's like everybody writes about, it's true. I didn't think it would be that bad. Yeah, Alpha Lima, you're 59 on Guam. What's your call?

BT: I've heard them. They never come back. They're too busy putting you into the log or something.

DP: I could see it once or twice, but I mean, hundreds of times, hundreds of times you get the two letter calls. Sometimes I would laugh, and say, come on you guys, give me a full call, that's all I want to hear is full calls. Then you get a big pile-up and you can pick out the last two letters of somebody's call and you feel real stupid.

BT: One call, two calls? Is one call enough?

DP: It depends. Sometimes not, because they're so weak. But that doesn't bother me as much because as soon as you get something then you transmit and hopefully that guy has stopped transmitting. I don't know if the nets are the problem or not for the last two letters. It's still unbelievable how many people would work us and ask us to go to a net.

BT: Did you get a lot of requests for that?

DP: Lots of them. I can't believe it. It's hard not to yell at the guy. We'd start laughing, "NO, that's alright, I'm doing at least 150 an hour here."

BT: I think a lot of that bad operating comes from the nets. Because that's what they want, two letters. If a guy gives his whole call they get mad. This guy wants two letters, this guy wants a full call.

DP: I did nets when I was a little kid, when the Afrikaaner net was on. I still knew it was stupid because you could tell that the guys that were on the net were into the ego gratification of the whole thing. But, regardless, if that's the only way some guy will operate, then it's better than not having him operate. But they are not run well. They spend more time arguing back and forth and correcting people's signal reports, all the time they spend doing that, this guy could be working somebody.

BT: Did you work the WARC bands?

DP: We spent a lot of time on the WARC bands because we knew we were in generally rare places, so we tried to be where no one had been.

BT: How'd you find the WARC bands to be?

DP: The conditions weren't bad, 18mhz is usually really good, but there was not a lot of activity. Just a few guys in the states that pestered you every time you got on the radio, "When you gonna be on 10 mhz, I gotta work you there!"

The WARC bands are fun, I kind of admit having fun doing that. I know Mark did too.

BT: They're good bands.

DP: Barefoot, we did great. We met a lot of people, they were kind of surprised to hear us. Like UL8PA. I worked him once from each location. He was always CQing at 18069, and he was amazing, because I was so weak from Saipan, but he kept listening and listening and he pulled the call out. He goes "I can't believe it. I'm going to write you." And then I called him from Guam and I

called him from Palau.

BT: Palau is located where from Guam?

DP: It's 800 miles southwest of Guam. Quite a ways. It's only 4 degrees north of the equator. A really beautiful place.

BT: So that's considered the Carolines?

DP: Used to be the Western Carolines. The rare, rare Carolines. I don't think I've ever worked it on phone from Illinois. It's considerably rarer than East. The East is V63 now. Palau is wonderful, just a wonderful place. It's really lush and very tropical. It rains a lot.

BT: How was transportation to the islands?

DP: Anywhere you want to go in the Pacific you can get to from Guam. They call Guam "The Gateway to the Orient." Everything flies through Guam. You can get to Nauru from Guam, to Papua New Guinea. There's flights almost every day to those places, and Indonesia, the Philippines.

BT: Was it expensive?

DP: Yeah, if we didn't have places to stay it would have been worse. The hotels in Saipan were pretty expensive. We spent $85 a night there. The hotel on Palau was not a nice place but it was OK, it was $35 a night. Perfect for us. We spent more than that on electricity, I'm sure!

BT: How receptive were these places to ham radio?

DP: In Palau, we never actually saw a man in the place, it was just three or four Filipino women that worked there. They had an idea what ham radio was because I talked to K1XM before I left and he'd been there, about a year before and I asked them, "Do you remember Paul Young?" "Ham radio guy?" She said, "Paul Young, I remember Paul Young. He on roof all the time."

The best thing to do where people don't understand radio or know what you're doing is to be very congenial, very friendly, try to build a good relationship with them. It works every time. We had that in Saipan, the Blueberry Hotel, we had the guy helping us. We had to go through a little hatch on our stomach to get out on the roof. And he came up and checked on us and made sure we were OK.

BT: What about electricity from these places?

DP: Most of it is pretty good and stable. It's mostly 110. We'd been forewarned by Paul that the circuit breakers at the Palau hotel wouldn't handle much. And our room had air conditioning and a refrigerator in it too, believe it or not. So we borrowed an extension cord, we didn't want to carry it. Good thing we didn't have to buy it because they're real expensive. Borrowed one from KC6ZZ and one day while the maids are in cleaning the rooms across the hall we plugged into their switches on another breaker, and we ran the amplifier off that, and the air conditioning off ours, and unplugged the refrigerator when the second radio was on, and still, all night the lights in the whole hotel were blinking. All night, for six days.

BT: How did the amplifier do?

DP: The Dentron put out 500 or 600 watts for us, which made a huge difference. It's a lot smaller than we thought. The airlines lost it from Guam to Palau, so we didn't get it for a day and a half later, and we ended up carrying it by hand for about a mile.

BT: So you worked WPX from Guam? All Bands?

DP: We had capability to go to 160, but we didn't. Five band Multi-single. We operated the full 48 hours. Conditions were pretty poor, they were really bad during the day. The rates weren't good but they were constant. I had a couple of hours in 130s, 140s at night to Europe. It's OK, it'll be a top 5 score I think.

BT: How was your score?

DP: We had 3,700 QSO's and almost 800 prefixes for 9.4 million points. It's better than I thought we'd do the way conditions were, but it was just so easy. You sit down there and run.

BT: What were your antennas?

DP: A KT34A at 50 feet and wires.

BT: And that was from whose QTH?

DP: On Guam from KD7P. Good contest, it was fun. We used K1EA, even. So it was very little work. Bob's really big on computers. Bob loaned us all kinds of stuff. He'd been on expeditions of his own. He gave us lots of advice.

BT: Any band in particular that seemed to be really hot from out there during WPX?

DP: Both 20 and 15. They're equal. We had had like 1564 on 15 and 1562 on 20. They were both equal, almost identical with the same type of openings.

BT: How's 80 from out there?

DP: Terrible. Really bad. It's summer, you know, it's the end of May.

BT: How's the static?

DP: Pretty bad. There's a lot of local noise. In the really highly populated places like Hong Kong, you have a city full of flourescent lights and dimmer switches and power lines and stuff. And most of those areas everything is above ground. Power lines are all noisy and everything is coated with salt. Everything, it just radiates. There's very little you can do about.

The salt corrosion occurs within weeks of putting up an

antenna. That was the problem we had with Bob's KT34, we just could not tune it. And that's a terrible antenna to have to mess with and he knows that now. He wants another antenna.

BT: Monobanders?

DP: That's the best way to go. That's what KG6DX has used for years. The A3 Cushcraft worked really good. We were loud. We put it up on Guam to play with it, and mark the elements and stuff so we could put it together quickly. We put it up on Palau, about 70 feet up on top of this hotel. It was beautiful to look at. And it was loud. Europeans were just praising us left and right, "you're so loud, loudest thing I've ever heard out of the Pacific, new country on all bands." That was the most gratifying part, was hearing "new country" from somebody.

BT: You mentioned the increasing Japanese population.

DP: The Japanese are really spreading through the islands. I think that's good. They own a lot of property on the islands, they're putting up a lot of resorts. There are lots of places from there to operate from. I think that's going to continue to be their mode of getting away from Japan to operate. And it's so easy to get to, really. When you consider just making two connections an go somewhere rare. KC6 is kind of politically lost right now. They seem to be anti-American but they're not. They're really friendly.

We probably split our time 50/50 between operating and sightseeing. Especially on Palau. The bands were terrible during the day anyway. We hardly ever slept the whole time.

BT: The Hotel Blueberry? (Saipan)

DP: What a great place. They had a little gambling casino on the bottom floor. Just very few people staying there, just like in Palau, where we were probably one in three guests. It was absolutely the best place to set up for an expedition that I could ever imagine. And it had railing at the top of the roof that you could just U-bolt masting to. We got our antennas up really well.

BT: So you took a lot of supplies out there?

DP: We ended up building five antennas on the trip. We were always cutting wire and putting coax connectors on, we didn't prepare well enough.

BT: Did you have excess baggage when flying?

DP: I've found a lot of these places, when travelling, if you just tip them good enough, it goes on through. Mostly, we didn't have any trouble except one time when I was trying to check the A3 aboard to Palau. There was nobody on the plane and we had to pay extra to take something that was a foot too long, and didn't weigh anything.

The 930s were great. And I'm surprised they didn't blow up. I am notorious for blowing things up.

BT: They never got damaged?

DP: No. We got a couple of scratches, but they worked just fine. You could bring a smaller rig but then you have to bring a power supply and more cable and it turns out to be even more bulky and just as heavy. If it had a keyer built in it would be even more perfect.

We made 7900 contacts from Palau in six days. We had 7,800 from Guam and 1,700 from Saipan. Most of them, at least 75% of them are on code.

After being up for hours and hours on Palau, we're about to close, we set the time to close down as 00, and it's 2300. I went up on the roof and flipped the antenna towards South America. That's 11,000 or 12,000 miles from Palau, and I'm working these guys. I'm having these real weak CXs and LUs calling me on 10 meters and you have to beam right over VK and they're 50 over 9. And you could hear these really weak South Americans who can't hear the VKs, all they can hear is me, real weak, calling and calling.

AG9A, Mark, and AA9AK, Dave, on Palau with 930s.

The K4VX Super 6 Yagi

Every once in a while an antenna design appears which is so good that it must be shared with the rest of the amateur community. The design I will describe evolved while I was looking for a replacement for a six element 15 meter design I had been using for about seven years. This older design was based upon the classic simplistic Yagi and while it demonstrated adequate forward gain, it was very deficient in front to back ratio (F/B).

I started first by taking the first six elements of my Elephant Gun[1] design for 10 meters and scaling them to 15 meters. After numerous maximizing efforts using YAGIMAX[2], I arrived at the design in this article. As the results were serendipitous rather than precisely arrived at, I have no recollection as to what sequence was followed to the final design!

An examination of the YAGIMAX derived performance of the Super 6 is shown in Table 1. The forward gain which appears to be exceptional and the best F/B occur at approximately the center design frequency. As the F/B shown in Table 1 is only the value taken 180 degrees from the front lobe, I made a series of pattern plots at 21.000, 21.200, and 21.400 mHz to evaluate the rear lobes of the design. An inspection of Figures 2-4 will also show that in no case the rear lobes exceed -20 db from the front lobe. In addition, to substantiate the YAGIMAX derived patterns I next plotted the performance at 21.200 mHz using NEC2[3] code. These results are shown in Figure 5.

As the element lengths shown in Table 1 are for cylindrical tubing with no taper and without the presence of a boom, I next used the TAPER[4] program to arrive at the actual element schedule provided in Table 2. In this case the boom is 3.0 inches in diameter and the elements are secured to the boom using 5" by 6" aluminum mounting plates.

In my case the old 6 element design used a 40 ft. boom with the mounting plate in the center. Initially, I was concerned that the additional 8 ft. extension to the director end would make the antenna unbalanced. However, this is not the case as the center of gravity for the Super 15 is 20.25 feet from the reflector end, or an almost perfect balance. I next ran the design through WA4DRU's wind loading program[5] which indicated that only a small wind unbalance existed which could be corrected by a 3" by 6" vertical plate mounted 24" from the reflector end, but also indicated that the correction was probably not required except in those areas where high winds are the norm.

How does it work? Well, I will be better able to provide that answer after the 1991-92 contest season where it will be given a real workout!

References:

1. Lew Gordon, K4VX, "The K4VX Elephant Gun", The ARRL Antenna Compendium Volume 3, 1991.

2. YAGIMAX is an antenna modeling program written by K4VX which uses three term integration and second order self impedance correction to derive the far field energy.

3. The NEC2 program is a method of moments solution to antenna modeling. It is available from The Applied Computational Electromagnetics Society (ACES), R. W. Adler, Code 62AB, Naval Postgraduate School, Monterey, CA 93943.

4. TAPER, YAGIMAX, and MATCH are available from K4VX for $8.00.

5. The wind modeling program is available from Allen B. Harbach, WA4DRU, 2318 S. Country Club Road, Melbourne, FL 23901.

Table 1

Element:	Length (in.)	Spacing from ref.(in.)	Dia.(in.)
Reflector:	278.8656	0	1.00000
Driven Ele.:	265.0236	58.0000	1.00000
Dir. #: 1	258.7834	128.0000	1.00000
Dir. #: 2	252.7621	270.0000	1.00000
Dir. #: 3	253.9089	430.0000	1.00000
Dir. #: 4	245.5070	572.0000	1.00000

Normalized Radiation Res. at 21.200 mHz is 21.66 Ohms

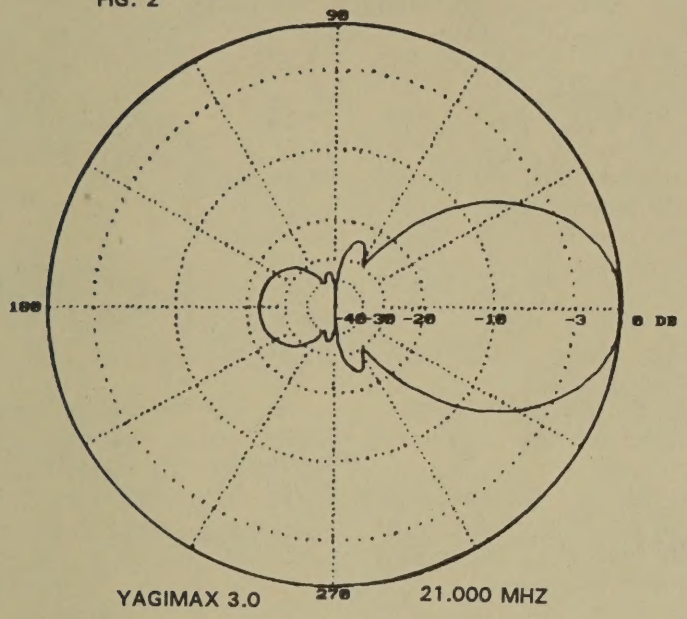
Freq.	dBi	F/B (dB)	IMP. (ohms)	VSWR
21.000	11.70	22.66	21.72-j14.65	1.49
21.050	11.75	25.01	20.96-j12.93	1.37
21.100	11.79	28.43	20.23-j11.04	1.24
21.150	11.83	34.45	19.59-j9.01	1.12
21.200	11.84	51.90	19.12-j6.96	1.00
21.250	11.85	34.10	18.83-j5.03	1.11
21.300	11.83	28.57	18.67-j3.44	1.20
21.350	11.79	25.69	18.38-j2.46	1.27
21.400	11.72	24.27	17.33-j2.20	1.32
21.450	11.63	24.25	14.66-j2.06	1.48

Table 2 Tapered Half Element Schedule

Diameter (in)	1.0000	0.8750
Ref.	72.0000	69.6250
D.E.	72.0000	62.7500
Dir. 1	72.0000	59.5000
Dir. 2	72.0000	56.5000
Dir. 3	72.0000	57.0000
Dir. 4	72.0000	52.7500

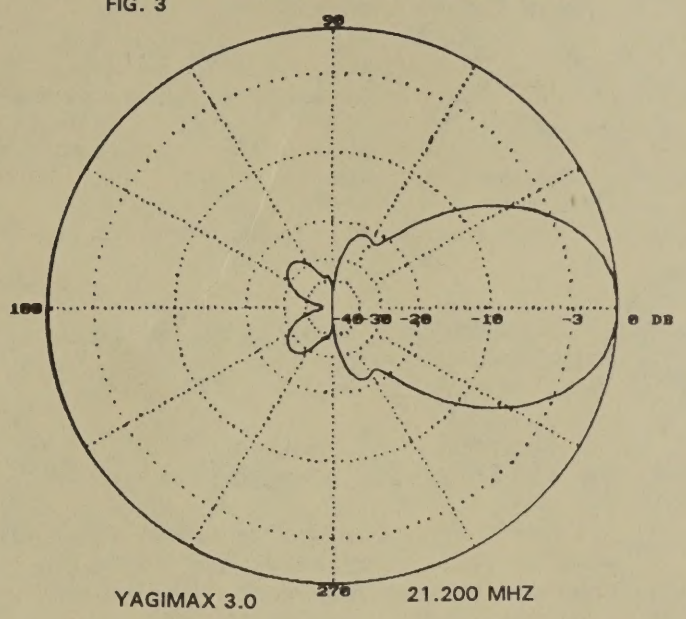
(The 0.8750" tip lengths assume a non-insulated mounting plate 0.125" thick, 5.0" wide, and 6.0" in length.)

E-PLANE OF 6 EL YAGI 11.70 DBI
FIG. 2



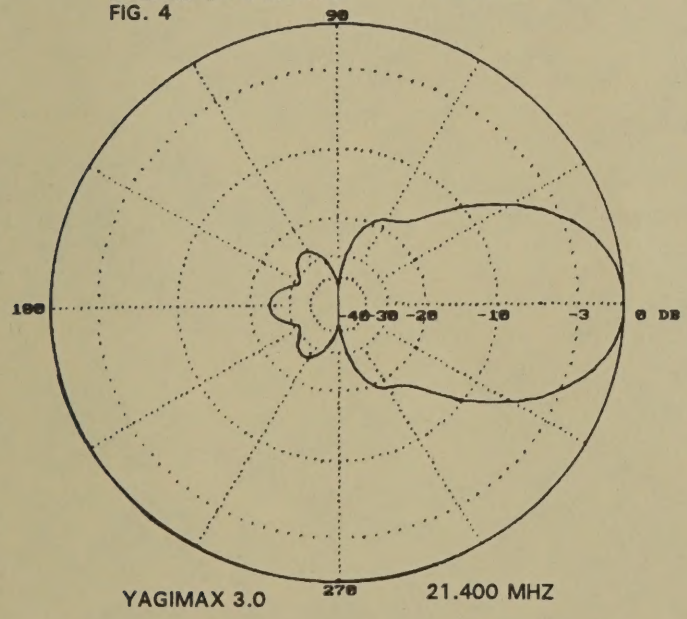
YAGIMAX 3.0 21.000 MHZ

E-PLANE OF 6 EL YAGI 11.84 DBI
FIG. 3



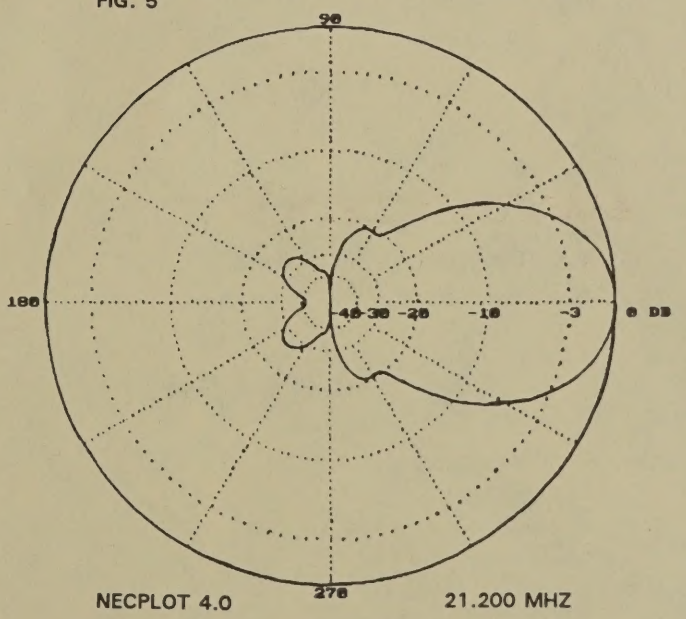
YAGIMAX 3.0 21.200 MHZ

E-PLANE OF 6 EL YAGI 11.72 DBI
FIG. 4



YAGIMAX 3.0 21.400 MHZ

E-PLANE SUPER615 11.72 DBI
FIG. 5



NECPLOT 4.0 21.200 MHZ

South Sandwich

1992 will see the most wanted VP8 fall to a team of ten experienced operators led by a group from the USA with previous Antarctic expedition experience. The team includes operators from Asia and Europe.

They will travel to the Falkland Islands to board the transport ship March 14, 1992. The trip to South Sandwich will take 7 days with the operation starting on or about March 21 and lasting 14 days.

A contract has been signed with the ship and a $20,000 deposit paid. All equipment and supplies are now stored aboard the ship and include four complete HF stations with amplifiers, 40-10m beams, 160-40m verticals, and three 4-kw generators. An all mode, all bands with RTTY and VHF operation for 14 days is planned.

The DXpedition is now 60% funded with contributions and firm pledges to date totaling $64,000. Each operator contributed $5000. Additional funding needed by January 1992 is $40,000.

This may be the last chance to effectively activate this VP8 this solar cycle. All donations big and small will help. All contributions go to: Gerry Branson, 93787 Dorsey Lane, Junction City, Oregon, 97448 U.S.A.

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South Sandwich continued

CW and RTTY QSLs go to KA6V and SSB QSLs go to AA6BB. Please include generous $$$ contributions with all QSLs.

If anyone wants additional information, or can help with fundraising, call or write to Al, WA3YVN at (407) 727-0201 (home).

This information courtesy of Al Hernandez, WA3YVN.

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Editor's note - *Due to a run in with pneumonia, this issue was made several weeks late. I apologize for the delay and hope that you find this issue worth the wait.*

KH6BZF Reports

	Flux	SSN	Alpha	K
10 Nov.	195	209	14/16	2
11 Nov.	198	211	14/16	3
12 Nov.	192	167	07/11	1
13 Nov.	181	154	11/13	3
14 Nov.	184	151	14/16	3
15 Nov.	173	135	14/21	4
16 Nov.	166	113	21/22	3
17 Nov.	165	125	21/16	4
18 Nov.	163	113	23/27	3

Since the 15th of November the DX polar paths have been poor to non-existent. More 6 meter openings may be expected centered around the 6th and 7th of December or during disturbed conditions. From the 15th to the 30th of November the geomagnetic field is expected to return to active conditions with band conditions low normal to below normal.

U.S.RADIOSPORT

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